REMARKS

Reconsideration of the rejections based upon the foregoing amendments and the following remarks is respectfully requested.

A. Claims 7-15 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement.

Specifically, the Office Action alleges that claim 7 has been amended to require a "third pair of electrodes in operative communication with the chamber" and a third step of "measuring an analyte concentration of the biological fluid using the third electrodes," however no support has been cited nor found for the combination of steps now present in claim 7. A similar rejection was applied to independent claim 12. Applicants respectfully traverse.

It is respectfully submitted that the paragraph bridging pages 55 and 56 in the specification as originally filed provided full support for the combination of steps now present in independent claims 7 and 12. Specifically, the paragraph discloses an embodiment in which the measurement electrodes are used to detect the dosing of the sensor and separate dose sufficiency electrodes are used to detect when the sample reaches the second pair of electrodes. The time between these two events is compared to a predetermined threshold in order to determine if a maximum dosing time delay has been exceeded. The paragraph goes on to further describe an alternative embodiment in which "an independent pair of dose detection electrodes (not shown) may be added upstream from the measurement electrodes in order to detect when the sample is first applied to the sensor." (p. 56, ll. 11-13). It is respectfully submitted that this passage

provides support for the subject matter of claims 7 and 12, and that claims 7-15 therefore comply with the written description requirement under 35 U.S.C. §112, first paragraph.

B. Claims 1-5 and 16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Neel et al. (US 6,743,635 B2) in view of Beaty et al. (US 6,645,368 B1) ("Beaty"). Claim 6 was rejected under 35 U.S.C. §103(a) as being unpatentable over Neel in view of Beaty, and further in view of Feldman et al. (US 6,592,745 B1) ("Feldman").

Claim 1 specifically requires "applying a first test signal to at least one of the first pair of electrodes; measuring a first response to the first test signal; maintaining the first pair of electrodes in an inoperative state after the measuring the first response; applying a second test signal to at least one of the second pair of electrodes, wherein the second test signal is a signal having an AC component; measuring a second response to the second test signal; and performing a measurement upon the biological fluid after the measuring the second response." It is respectfully submitted that the above-recited combination of steps is not taught or suggested in the prior art of record.

The Office Action concedes that Neel teaches the use of a DC signal applied to dose sufficiency electrodes, but does not disclose the use of a signal having an AC component. In an attempt to cure this deficiency, the Office Action suggests that Beaty discloses applying an AC signal to measurement electrodes to determine sample volume sufficiency, therefore it would have been obvious to use a signal having an AC component with the dose sufficiency electrodes of Neel.

It is respectfully submitted that, rather than rendering the claimed invention obvious, the combination of Neel and Beaty teach away from the present invention. Neel teaches the use of a

separate pair of dose sufficiency electrodes and the application of a DC signal thereto. The reason that Neel uses a separate pair of dose sufficiency electrodes (i.e. separate from the measurement electrodes) is that Neel does not want to apply the DC signal to the measurement electrodes and thereby disturb the reaction between the sample and the reagent in the measurement zone. By applying the DC signal to the dose sufficiency electrodes and leaving an open circuit between the measurement electrodes, the stoichiometry of the measurement zone is not disturbed until the measurement sequence is ready to begin. See Neel, col. 14, line 55 to col. 15, line 25.

Beaty, on the other hand, teaches that the adequacy of the sample volume can be determined by applying an AC signal of proper level directly to the measurement electrodes, without the need for separate dose sufficiency electrodes. This is because the AC signal will not drive the sample redox (reduction-oxidation) reaction in one direction. Therefore, a combination of Neel and Beaty teaches that the separate dose sufficiency electrodes of Neel are unnecessary since the application of an AC signal to the measurement electrodes achieves the same result without the need for an additional pair of dose sufficiency electrodes. There is nothing in the combination that would suggest to one of ordinary skill in the art that a signal having an AC component should be applied to separate dose sufficiency electrodes since Beaty demonstrates that this is unnecessary when using an AC signal. Feldman does not relate to the use of a signal having an AC component. It is therefore respectfully submitted that Applicants' claim 1 is allowable in view of the references of record.

Claims 2-6 and 16 depend from claim 1 and therefore include all of the limitations of claim 1. It is therefore respectfully submitted that claims 2-6 and 16 are allowable over the references of record for at least the same reasons set forth above with respect to claim 1.

For the foregoing reasons, Applicants respectfully submit that the present application is in condition for allowance, and respectfully request such action. Applicants respectfully request that the Examiner telephone the undersigned attorney for Applicants at 317-634-3456 if the Examiner does not find that all claims are in condition for allowance as presented herein.

Respectfully submitted,

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